Universidad Zaragoza

26626 - Didactics: Arithmetic II

Syllabus Information

Academic Year: 2022/23

Subject: 26626 - Didactics: Arithmetic II

Faculty / School: 107 - Facultad de Educación

202 - Facultad de Ciencias Humanas y de la Educación

301 - Facultad de Ciencias Sociales y Humanas

Degree: 298 - Degree in Primary School Education

299 - Degree in Primary School Education

300 - Degree in Primary School Education

ECTS: 6.0

Year: 3

Semester: First semester

Subject Type: Compulsory

Module:

1. General information

2. Learning goals

3. Assessment (1st and 2nd call)

4. Methodology, learning tasks, syllabus and resources

4.1. Methodological overview

The future teacher must develop a didactic action focused on problem solving and on the interaction of the child with its material and social environment. Therefore, the teaching offered in this subject is based on the same principles. In general, the master class will not have the traditional function of sequential presentation of contents, but will serve to anchor the contents, both mathematical and didactic, which have previously appeared in the practical classes, around the tasks of problem solving, case studies, etc?

This course presents different methodological strategies to develop the assigned competences. The methodology followed in this course include:

- Lectures
- Active learning methodologies
- Group or individual assignments
- Oral presentation and discussion of projects
- Tutorials

4.2. Learning tasks

Theory sessions. In these sessions, the teacher will explain theoretical contents with a more interactive and participative character than the master class. In some theoretical sessions, students will be proposed to solve problems of mathematical and/or didactic content.

Practice sessions (split group). In the practical sessions, students will solve problematic situations, questions, cases... manipulating different didactic materials, in order to answer the questions that are raised in the script of practices. These activities will be both mathematical and didactic in nature. To answer the questions, it will be necessary to construct new concepts, and deeply review those already known.

Individual assignments, which will be handed in and will therefore have their weight in the continuous evaluation grade. The feedback for these assingments will take place out of the regular timetable.

Special practice. A part of the assessment of the subject will be a team assignment. Teams will be formed by five students, approximately. Previously arranged seminars will be held to detail the work to be done, to supervise its progress and to evaluate the participation of each one of the team members, as stated in section 4.4.

4.3. Syllabus

Didactics of linear magnitudes and their measurement. Didactics of rational number arithmetic: models, representations and operations. The arithmetic of the rational number in the curriculum of primary education. Situations and didactic resources in the teaching of arithmetic of rational number in primary education.

These contents are organized in thematic units. In each one of them, both mathematical and didactic aspects will be worked jointly.

4.4. Course planning and calendar

The calendar of presence-based sessions, presentation of assignments and key dates is communicated through the Moodle plattform (ADD) at the beginning of the semester.

In the Faculty of Education of Zaragoza, the first and second sessions corresponding to the special practice will be held on the same days of the week that there is a theory or practice class during the third and seventh week of classes, respectively, during the regular hours indicated for "Seminars, directed works and recovery of classes".

In the Faculty of Human Sciences and Education of Huesca, the follow-up of the special practice will be carried out in the weekly session assigned for this purpose.

In the Faculty of Social and Human Sciences of Teruel, the special practice will take place during the timetable of the subject dedicated to practical classes and will be distributed in 2 sessions as follows: the first one will be during the fourth week of classes, the second session will be during the sixth week.

The dates of the final exams can be checked on the web page of the corresponding Faculty.

4.5. Bibliography and recommended resources

It can be found on the library's web page.

http://psfunizar10.unizar.es/br13/egAsignaturas.php?codigo=26626